January 3, 2020

Ms. Marlene Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> St. SW Washington, D.C. 20554

Re: USTelecom Ex Parte Notice, WC Docket No. 19-126, Rural Digital Opportunity Fund, WC Docket No. 10-90, Connect America Fund

Dear Ms. Dortch:

Numerous parties<sup>1</sup> have recently made proposals in this proceeding to give fiber-to-the-home (FTTH) services an even greater preference than the substantial advantage already proposed by the Commission in the Rural Digital Opportunity Fund (RDOF).<sup>2</sup> USTelecom opposes these proposals because they risk leaving the bulk of RDOF-eligible locations without broadband. The RDOF will only succeed in shrinking the digital divide if multiple broadband solutions have a fair chance of winning the support needed to deploy in the truly high cost areas. USTelecom supports fiber deployment; it is firmly on record urging the Commission to use the RDOF to invest in terrestrial, fiber-based infrastructure today in order to meet its future 5G goals.<sup>3</sup> USTelecom has also put evidence on the record about the positive externalities derived from investing in fiber infrastructure,<sup>4</sup> and many of its members will deploy FTTH technologies in

\_

<sup>&</sup>lt;sup>1</sup> See Letter from Michael R. Romano, Senior Vice President—Industry Affairs & Business Development, NTCA—The Rural Broadband Association, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 19-126, 10-90, at 2 (filed Dec. 23, 2019) (Joint Ex Parte) (describing joint meeting of ACA Connects, the Fiber Broadband Association, National Rural Electric Cooperatives Association, and NTCA); Letter from Jonathan Chambers, Partner, Conexon, LLC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 19-126, 10-90 (filed Dec. 26, 2019) (Conexon Ex Parte).

<sup>&</sup>lt;sup>2</sup> See Rural Digital Opportunity Fund, Connect America Fund, Notice of Proposed Rulemaking, WC Docket Nos. 19-126, 10-90, FCC 19-77, para. 25 (rel. Aug 2, 2019) ("Notice") (proposing to give the "Gigabit" tier, which is currently most achievable through FTTH services, a substantial weight advantage of 25 over the "Above Baseline" tier and 50 over the "Baseline").

<sup>&</sup>lt;sup>3</sup> See, e.g., Comments of USTelecom—The Broadband Association, WC Docket Nos. 19-126, 10-90 at 21 (filed Sept. 20, 2019) ("A robust fiber backbone throughout rural America will not be built absent government subsidies, so it would be logical to use this unprecedented \$20.4 billion investment as a springboard to promoting advanced rural capabilities, including 5G technology."); Reply Comments of USTelecom, WC Docket Nos. 19-126, 10-90 at 2 (filed Oct. 23, 2019) ("The record speaks loudly that investing in terrestrial broadband, which inherently requires deeper fiber deployment, will enhance rural connectivity today and offer a gateway to next generation 5G services").

<sup>&</sup>lt;sup>4</sup> See Coleman Bazelon, The Brattle Group, *Public Interest Benefits of Expanding Fiber Networks* (Oct. 2019) available at <a href="https://www.ustelecom.org/research/public-interest-benefits-of-expanding-fiber-network/">https://www.ustelecom.org/research/public-interest-benefits-of-expanding-fiber-network/</a> (also filed as an attachment to the Reply Comments of USTelecom) ("Bridging the rural-urban digital connectivity gap is a top priority for the [FCC]. The goal requires ensuring more rural homes receive high quality broadband services that are dependent on fiber backhaul. Importantly, in addition to providing superior last mile connectivity, policies that facilitate fiber deployments deeper into rural networks to support home broadband connections also produce

areas where they are RDOF winners. But USTelecom is also firmly on the record supporting reasonably comparable technology neutral broadband deployment *today* to the millions of locations that currently lack it, rather than providing premium service to a selected few via the auction design.<sup>5</sup> The Commission faces a policy choice – support broadband access to all Americans, within the scope of its budget, or fund higher speed connections in more populated areas while making other rural Americans wait their turn. Unless the Commission is prepared to significantly increase its proposed budget for the RDOF, it should maintain a course in which all or nearly all Americans are able to receive broadband over a variety of terrestrial broadband technologies.

The fundamental problem with favoring FTTH technologies so heavily is that the population density of the vast area to be supported in the RDOF is too low to allow FTTH as an economically-feasible option for serving millions of Americans. As a coalition of companies and associations recently submitted for the record, and USTelecom supports in full, the CAF Phase II auction shows that density absolutely matters with respect to the service to be provided. "[P]opulation density of areas with Gigabit winners averaged nine locations per square mile and ranged as high as 28 and 41 locations per square mile." Meanwhile, "in the CAF II auction, providers of 25/3 Mbps low latency service prevailed in [Census Block Groups] with an average density of just three locations per square mile," which is important "because 25% of the eligible census blocks (CB) that will be up for bid have five or fewer locations per square mile. 40% of RDOF CBs have fewer than ten locations per square mile." Said differently, proposals to favor FTTH even more heavily would funnel broadband funding into higher-density population areas and leave the bulk of the hardest to serve rural locations further behind.

It should be no surprise that the parties advocating for even more preferential weights for fiber are also advocates of smaller, more targeted minimum service areas than the census block group (CBG) that the Commission proposes to use. ACA Connects has said that the "Commission's plan to use census block groups or a larger area as the minimum bidding unit is imprudent and will discourage RDOF auction participation by service providers that cannot make the business case for bidding for census block groups that include some eligible census blocks which they deem economic to serve and others which they deem uneconomic to serve (in effect, a forced, inefficient cross-subsidy)." It is important to note that half of all census blocks are smaller than a tenth of a square mile in size and the majority of RDOF locations are in CBs that are one

significant additional benefits that would not otherwise occur if the same funds were used to support satellite broadband service.").

<sup>&</sup>lt;sup>5</sup> See Letter from Mike Saperstein, USTelecom, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126, at 3 (filed Dec. 18, 2019).

<sup>&</sup>lt;sup>6</sup> See Letter from John Badal, Sacred Wind, Steve Coran, WISPA, et al., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126, at 1 (filed Dec. 13, 2019) (50/5 Mbps Ex Parte) (describing a joint meeting including Sacred Wind, WISPA, AT&T, Nextlink, USTelecom, Midco and Windstream).

<sup>&</sup>lt;sup>7</sup> *Id*. at 2.

<sup>&</sup>lt;sup>8</sup> Comments of ACA Connects, WC Docket Nos. 10-90, 19-126 at 10 (filed Sept. 20, 2019). UTC, which represents the interests of electric utilities, took a similar position. *See* Comments of the Utilities Telecom Council, WC Docket Nos. 19-126, 10-90 at 7-8 (filed Sept. 20, 2019).

square mile or less in size. An average CBG contains just 39 census blocks. In other words, ACA wants to be able to cherry pick individual census blocks so it can focus its FTTH deployment on micro-areas that are economic to serve while leaving other harder to serve areas behind. This is contrary to the program's goals as expressed by the Notice 10 as well as Chairman Pai 11 and other Commissioners. 12

To be sure, USTelecom agrees that FTTH should be supported but the Commission must strike the right balance to cover more rural American locations with speeds well in excess of the baseline. This is precisely why USTelecom has advocated for both adding a 50/5 Mbps tier, that would allow providers to serve broad geographic areas with speeds twice the baseline, <sup>13</sup> as well as a proposal to adjust the upload requirement of the 100 Mbps tier to 100/10 Mbps, which would cut the cost of service by half, freeing up more funding for more broadband across rural America. <sup>14</sup> Notably, with respect to the 50/5 tier, Microsoft recently expressed its support for this additional tier, highlighting how the tier is more conducive to deploying a broadband technology to the more "sparsely populated rural areas, especially those with large farms or other agribusiness." <sup>15</sup>

Conexon proposes to halt the bidding at the budget clearing round for FTTH services, an additional weight for FTTH services, regardless of whether that maximizes the budget and/or leaves funding available for Phase II of the RDOF. The *Notice* already sufficiently favors FTTH service by proposing to weight it at zero; further preference would serve only to reduce the percentage of Americans that the budget can serve. Conexon's response to whether its proposal will save funding for Phase II is sheer indifference.<sup>16</sup> The Commission expected that competition in Phase I of the RDOF would help to support Phase II,<sup>17</sup> which would serve to

<sup>&</sup>lt;sup>9</sup> See More About Census Blocks, FCC, <a href="https://transition.fcc.gov/form477/Geo/more\_about\_census\_blocks.pdf">https://transition.fcc.gov/form477/Geo/more\_about\_census\_blocks.pdf</a> (last visited Jan. 3, 2020).

<sup>&</sup>lt;sup>10</sup> *Notice* at para. 13. ("The Rural Digital Opportunity Fund's objective is consumer-focused, "ensuring that high-speed broadband is made available to all Americans quickly, and at an affordable price.").

<sup>&</sup>lt;sup>11</sup> *Id.*, Statement of Chairman Pai. ("Phase I will allocate support to wholly unserved census blocks—that is, those areas where our existing data tell us there is no service at all—in order to make sure that the areas most in need will get broadband service as quickly as is feasible.") (emphasis added).

<sup>&</sup>lt;sup>12</sup> *Id.*, Statement of Commissioner O'Rielly ("While many tend to prefer fiber-based solutions, our resources are not unlimited, and our job is to get broadband to all Americans, regardless of technology."); Statement of Commissioner Carr ("Because while this Commission has made great progress in closing the digital divide—narrowing it by nearly 20 percent last year alone—the problem remains stubborn as we reach the most remote and underserved communities.").

<sup>&</sup>lt;sup>13</sup> See 50/5 Mbps Ex Parte.

<sup>&</sup>lt;sup>14</sup> See Letter from AJ Burton, Vice President, Federal Regulatory, Frontier Communications, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126, (filed Dec. 23, 2019) (100/10 Mbps Ex Parte).

<sup>&</sup>lt;sup>15</sup> Letter from Paul Garnett, Senior Director, Microsoft Corp. *et al.* to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 19-126, 10-90, at 1-2 (filed Dec. 20, 2019) ex parte at pages 1-2.

<sup>&</sup>lt;sup>16</sup> Conexon Ex Parte at 2.

<sup>&</sup>lt;sup>17</sup> Notice at para. 17. ("[T]he fact that any areas unawarded in the Phase I auction will roll over into the Phase II auction militates in favor of ensuring there is adequate inter-area competition in Phase I—our two-phase plan for the

offset the disparity between committing \$16 billion to Phase I and \$4 billion to Phase II. Given USTelecom's analysis showing that up to five million locations in partially-served census blocks are in need of support, is similar to Phase I of the RDOF, it is essential that the auction rules allow for competition to drive results below the budget and enable further deployment in Phase II.

Also, NTCA's proposed "symmetrical bonus," offering additional auction credit for providing a symmetrical download/upload, is not in the best interest of the program. Most consumer services offered today in urban areas offer a 10:1 ratio for download to upload to meet consumer demand, which does not require symmetrical upload and download capabilities. The RDOF should focus on ensuring a variety of technologies can compete for support so that more rural consumers get connected rather than further advantaging FTTH deployments by providing a budget busting "symmetrical bonus." Further, to the extent that higher upload speeds may be useful for precision agriculture or other applications, there is no rule that prevents a Rural Digital Opportunity Fund winner from offering a symmetrical service to meet that need.

Finally, while USTelecom agrees that "[t]he 5G future will not be realized, however, without substantial investments in the kind of fiber facilities needed to enable the speed and handle the data demands anticipated for 5G services,"<sup>22</sup> proposals offering disproportionate weight to FTTH would actually serve to diminish the Commission's ability to use the RDOF as a springboard to 5G. The Chairman's goal for the 5G fund is that "this major investment in rural America would be allocated through a reverse auction and would target hard-to-serve areas with sparse populations and/or rugged terrain."<sup>23</sup> Yet as shown above, deploying FTTH to fewer, more dense areas would mean that the less-dense, harder to serve areas that the Chairman seeks to target through the 5G Fund would lack the necessary fiber infrastructure for 5G. Ensuring the RDOF supports other broadband technologies that extend the reach of fiber further into rural areas as middle mile or backhaul facilities will lay the groundwork for 5G more effectively than geographically limited FTTH deployments. It would be far more efficient for the Commission to provide a broad fiber backbone across rural American than hardwire a select handful of individual locations.

Rural Digital Opportunity Fund means we can ensure an efficient auction while furthering our commitment to universal service.").

<sup>&</sup>lt;sup>18</sup> USTelecom Comments at 6.

<sup>&</sup>lt;sup>19</sup> See Letter from Michael R. Romano, Senior Vice President—Industry Affairs & Business Development, NTCA to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126, at 2 (filed Dec. 16, 2019) (NTCA Ex Parte).

<sup>&</sup>lt;sup>20</sup> See 100/10 Ex Parte, Lamay-Yates Associates Attachment at 2; Letter from Louis Peraertz, Vice President of Policy, WISPA, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 19-126 (filed Dec. 31, 2019).

<sup>&</sup>lt;sup>21</sup> NTCA Ex Parte at 2.

<sup>&</sup>lt;sup>22</sup> Joint Ex Parte at 2-3.

<sup>&</sup>lt;sup>23</sup> Chairman Pai Announces Plan to Launch \$9 Billion 5G Fund for Rural America, FCC, Press Release (Dec. 4, 2019) <a href="https://docs.fcc.gov/public/attachments/DOC-361168A1.pdf">https://docs.fcc.gov/public/attachments/DOC-361168A1.pdf</a>.

Please contact me with any questions.

Sincerely,

\_\_\_\_/s/\_\_ Mike Saperstein

Vice President, Policy & Advocacy

cc: Preston Wise
Arielle Roth
Joseph Calascione
Travis Litman
Austin Bonner